

# U.S. DEPARTMENT OF ENERGY WEATHERIZATION ASSISTANCE PROGRAM

#### THE BENEFITS

The Weatherization Assistance Program works to:

- Reduce energy costs and alleviate high energy burden for low-income families
- Decrease the nation's energy consumption and reduce dependence on imported oil
- Improve local air quality and avoid greenhouse gas emissions
- Provide economic boost in low-income communities
- Educate consumers in energy efficiency practices

### Mission

The U.S. Department of Energy's (DOE) Weatherization Assistance Program reduces energy costs for low-income Americans by increasing the energy efficiency of their homes, while ensuring their health and safety.

### **Operation**

DOE works in partnerships with state and local-level agencies to implement the program. DOE Regional Offices award grants to states, which then contract with local agencies. Weatherization programs operate in all 50 States, the District of Columbia, and among Native American Tribes. More than 970 local agencies comprise the Weatherization network. These local agencies provide weatherization services to every county in the nation.

The program prioritizes services to the elderly, people with disabilities, and families with children. High energy users or households with a high energy burden may also receive priority.

### **Needs Assessment**

High energy bills create an unmanageable burden for low-income families. These households typically spend 14% of their annual income on energy compared to 3.5% for other households. Rising energy prices can increase this burden to 20% or more. Low-income families often cut back on other necessities to pay their energy bills.

### Weatherization Services

Weatherization technicians use advanced energy audits and diagnostic equipment to identify the most cost-effective, energy-saving measures for each home. Services are delivered to single-family, multi-family, and mobile homes. Examples of these measures include, but are not limited to, installing insulation, reducing air infiltration, performing heating and cooling tuneups and modifications, and, when appropriate, replacing units for energy efficiency and safety. Clients are educated about the proper use and maintenance of the installed weatherization measures.

### **Technical Advancements**

Weatherization agencies have established a professional delivery system to provide quality energy efficiency services and materials. The integration of advanced technologies has increased the Program's impact. Results:

- Advanced energy audits used to determine most cost-effective measures;
- ✓ Blower door-directed air sealing produces higher energy savings;
- ✓ Weatherization creates \$2.10 in energyrelated benefits for every \$1 invested.



Weatherization technicians utilize blower door technology to diagnose and mitigate air infiltration.





# BUILDINGS FOR THE 21ST CENTURY

Buildings that are more energyefficient, comfortable, and affordable . . . that's the goal of DOE's Office of Building Technology, State and Community Programs (BTS). To accelerate the development and wide application of energy efficiency measures, BTS:

- Conducts R&D on technologies and concepts for energy efficiency, working closely with the building industry and with manufacturers of materials, equipment, and appliances
- Promotes energy/money saving opportunities to both builders and buyers of homes and commercial buildings
- Works with State and local regulatory groups to improve building codes, appliance standards, and guidelines for efficient energy use
- Provides support and grants to States and communities for deployment of energyefficient technologies and practices.

# Printed on Recycled Paper with a renewable-source ink

### **Energy Impact**

Weatherization measures increase energy efficiency and reduce energy costs. For every \$1 invested, the Program returns \$2.10 in energy-related benefits. Weatherization reduces annual energy consumption by an average of 31.2 MBtu per home. The average energy savings for natural gas space heating increased to 33.5% in 1996.

Weatherization plays an important role in the nation's energy security. At current production rates, Weatherization decreases national energy consumption by the equivalent of 15 million barrels of oil every year.

## **Economic Impact**

Weatherization measures reduce average annual energy costs by \$300 per dwelling.

Alleviation of the high energy burden faced by low-income Americans enables them to gain increased financial independence and flexibility for spending on other essential items.

For every \$1 invested by DOE, the Program leverages an additional \$3.39 from other federal, state, local, and private sources.

Agencies use leveraged resources to weatherize more low-income homes and to deliver more services while in the home.

Fifty-two direct jobs are created for every million dollars invested. Current DOE funding supports about 8,000 jobs nationwide.

Numerous service providers in the program are private contractors. In many cases,

Weatherization is their first entry level experience with residential energy conservation. Many jobs created by the program are in low-income areas, where most needed.



Technicians install dense-pack insulation to reduce heat loss and air infiltration.

### **Community Impact**

Weatherization is a wise investment of taxpayer dollars. The Program's cost-effective approach produces benefits for low-income households and communities. By reducing energy use in low-income homes, Weatherization:

- ✓ Spurs local economic development through re-investment of energy savings;
- Reduces power plant emissions and improves local air quality;
- ✓ Avoids emissions of greenhouse gases;
- Decreases demand for imported oil; and
- Educates consumers in energy efficiency practices.

#### FOR MORE INFORMATION CONTACT:

U.S. Department of Energy • Office of Building Technology Assistance, EE-42 1000 Independence Avenue, SW • Washington, DC www.eren.doe.gov/buildings/weatherization assistance

DOE/GO-102002-1473 January 2002